<u>, , , </u>											
Work Orde Friday, June 04,											Page 1
Item ID: Revision ID: Item Name:	D4022-041	Pump Assembly		Accept	100000000000000000000000000000000000000			S	Setup Sta		
	6/4/2010	Start Qty: 1.00 Req'd Qty: 1.00	***************************************		Cust Item II Customer:	D:					1010 114 1101 1 34 1
Approvals:	Process Pla QC:	n: <i>[]</i>	Date:	7 Tooling: SPC (Y/N):	Da	te:		F	Run Sta Sto		
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr D4022 100 Small Fab Small Fab	A	Memo assemble	as per dwg D4022 e+ A-1	0.00	=7m/2		10/11	(x) /16)		
QC Quality Control	•		npleteness to step on W/O	0.00	ul17			_@			
120 130000 (1810 (1810 1801 1801		Identify as per dwg &	Stock Location: 1/3	0.00							

120

Packaging Packaging

Memo

0.00

[c/o/1/17 (1)

									_	
W/O:			WC	ORK ORDER CHANG	ES					
DATE	STEP	PRO	PROCEDURE CHANGE					Approval Chief Eng / Prod Mgr	Approval QC Inspector	
										
Part No	:	PAR #:	Fault Cate	gory:	NCR: Yes	NCR: Yes No DQA: Date:				
	R	esolution:	Dispositio	າ:	_ QA: N/C CI	osed:		Date: _		
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCF	1)				
DATE	STEP	Description of NC		Corrective Action Section		ation	Approval	Approval		
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector	
i										

Work Order ID 59512

Friday, June 04, 2010 3:03:53 PM



Page 2

Item ID:

D4022-041

Accept



Setup Start

Stop



Revision ID:

Item Name:

Fuel Transfer Pump Assembly

Start Date:

6/4/2010

Start Oty: 1.00

Required Date: 6/10/2010

OC:

Req'd Qty: 1.00



Date:

Cust Item ID:

Customer:

Reference:

	nn:		ala.
А	րըյ	rov	als:

Process Plan:

Date: _____

Tooling:

SPC (Y/N):

Date:

Date:

Run Start

Reject

Qty

Stop

Sequence ID/

Work Center ID

130

OC

Operation Description

QC21- Final Inspection - Work Order Release

Memo

Set Up/ Run Hours

0.00

Tool ID Tool # Plan

Code

Accept Qty

Reject Number

Insp. Stamp

Quality Control

0.00

Dart Aerospace

W/O:			WO	RK ORDER CHANG	ES					e e
DATE	STEP	PR	OCEDURE CHAI	NGE	В	/	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:	Fault Cate	jory:	_ NCR: Y	′es N	o DQ	۱:	_ Date: _	
		olution:								
NCR:			WORK ORDE	R NON-CONFORMA	ANCE (N	CR)				
DATE	STEP	Description of NC		Corrective Action Section			Verific	ation	Approval	Approval
	0.2.	Section A	Initial Chief Eng	Action Description Chief Eng		gn & late			Chief Eng	QC Inspector
-11										

Picklist Print

Friday, June 04, 2010 3:03:57 PM

Work Order ID: 59512

D4022-041

Parent Item Name:

Fuel Transfer Pump Assembly

Comments:

Parent Item:

IPP rev A 10.02.02 new issue Prelim EC verified by:DD



Start Date: 6/4/2010

Required Date: 6/10/2010

Page 1

Start Qty: 1.00

Required Oty: 1.00

10	0.05.17 as per EC	N10-562 DD ver	f:EC	, siling a 5) 12	,	C 1.D		•	Start Qty. 1.00	,	Require	u Qty. 1.0	·U
Component Item ID/ Item Name D4022-1 Fuel Transfer Pump	Replacement Item ID	Mfg/ Purch Manufactured	Bin Item No	Primary Location	Last Location	Route Seq ID 100	Unit of Measure Each 5528	Qty on Hand 0.0000	Qty per Kit	Total Otv 1	Qty Issued	Date Issued	Status //6
D4022-5 Thermal Switch		Manufactured	No			100	Each	9.0000		1 M		ls/11,	16
				<u>Location</u> ENG	55518	Loc	Qty 9 9	Loc Code	_	2-		·	
AN815-6D	H H H H	Purchased	No			100	Each	8.0000	2	² M	1/	12/14	/16
					114348 114523	<u>Loc (</u>	Oty 8 M 11 ' 3 5	Loc Code { GTF		2	• •		
MS29512-06 O-RING		Purchased	No			100	Each	27.0000	2	2 W	1-6	pfu	16
					113691 114742	<u>Loc (</u>	27 7 20	Loc Code	 	2	•		

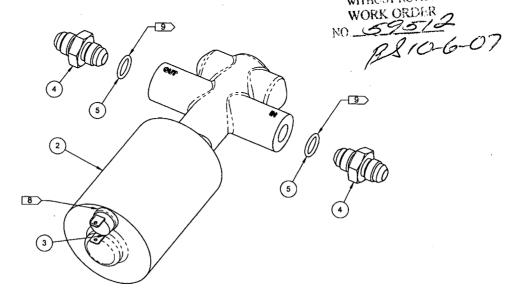
IPP Rev:B

W/O:			WC	RK ORDER CHANG	ES					t
DATE	STEP	PR	OCEDURE CHA	NGE	<u> </u>	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:	Fault Cate	gory:	_ NCR:	: Yes I	No DQ	4:	Date:	
		solution:								
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DATE	STEP	Description of NC	NC -				ection B Verific			Approval
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	1		1				1		I	

QTY. JOHN CAMERON AVIATION ITEM NO. PART NUMBER DESCRIPTION X D4022-041 FUEL TRANSFER PUMP ASSEMBLY A8150-B1-JCA 2 D4022-1 FUEL TRANSFER PLIMP 3 D4022-5 THERMAL SWITCH 4 2 AN818-6D FITTING, UNION 5 2 MS29512-06 O RING

SHOP COPY RETURN TO ENGINEERING UNCONTROLLED CORY SUBJECT TO AMENDMENT

2



D4022-041 FUEL TRANSFER PUMP ASSEMBLY

D

С

NOTES:	
1) MATERIAL:	N/A

D

1) MATERIAL: NIA
2) FINISH: NIA
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4022-041" AND B/N USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 2.61 lbs

7) WEIGHT: 20103 8) ATTACH D4022-5 THERMAL SWITCH TO D4022-1 FUEL PUMP IN LOCATION SHOWN USING METALSET A4 9) LUBRICATE O-RING WITH ULTRACHEM ASSEMBLY FLUID #1, FUEL-LUBE, MOLYKOTE 55 O-RING GREASE OR EQUIVALENT

NEW ISSUE 10.04.16 REV. DESCRIPTION DATE DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. A D4022 MFG. APPR. SHEET 1 OF 4 APPROVED TITLE SCALE **FUEL PUMP** DE APPR. NTS COPYRIGHT © 2010 BY DART AEROSPACE LTD 10.04.16

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W/O:			WO	RK ORDER CHAN	GES					<i>t.</i>
DATE	STEP	PRO	PROCEDURE CHANGE					Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Categ	ory:	NCR: Y	es N	o DQA	\:	Date:	
	Res	solution:	Disposition	:	QA: N/0	C Clos	sed:		Date:	
NCR:			WORK ORDE	R NON-CONFORM	IANCE (N	CR)				
DATE	STEP	Description of NC	Description of NC Corrective Action			Veriti			Approval	Approval
	O.E.	Section A	Initial Chief Eng	Action Description Chief Eng		gn & ate	Section	n C	Chief Eng	QC Inspector
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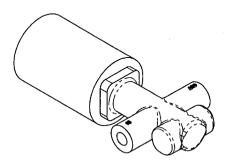
 DART AEROSPACE PART NUMBER
 JOHN CAMERON AVIATION PART NUMBER

 D4022-1
 REF JCA/M47/D3/SHT 13

D

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SPECIFICATION CONTROL DRAWING



Who 59512

DART PART NUMBER	SUPPLIER	SUPPLIER PART NUMBER	OPERATING VOLTAGE	FLOW (GPH)	OUTPUT PRESSURE (PSI)	TEMPERATURE RANGE
	WELDON	A8150-B1	24 VDC	35 - 50	5 - 25	-65°F TO +185°F
D4022-1	AEROSPACE ACCESSORIES	A8150-B1	24 VDC	35 - 50	5 - 25	-65°F TO +185°F

D4022-X FUEL TRANSFER PUMP



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/A ·		
S: PER DART QS	SI 018 UNLESS	OTHERWISE NOTE
ES UNLESS OTH	IERWISE NOT	ED
RP EDGES: 0.005	TO 0.010 MA	x
ION: N/A		
lbs		
	ES UNLESS OTH	S: PER DART QSI 018 UNLESS ES UNLESS OTHERWISE NOT RP EDGES: 0.005 TO 0.010 MA; ION: N/A

DESIGN	4	DART AEROSPACE LTD					
DRAWN	45	HAWKESBURY, ONTARIO, CANADA					
CHECKED	B	DRAWING NO.	REV. A				
MFG. APPR.	色	D4022	SHEET 2 OF 4				
APPROVED	14	TITLE	SCALE				
DE APPR.		FUEL PUMP	NTS				
DATE 10.0	4.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND COMPENTIAL AND A EMPRISED ON THE CUMESS CONDITION THE NOT TO BY USED FOR MAY PURPOSE OR COMED OR COMMUNICATED TO ANY OTHER PERSON WITH WINTTEN PRIMASSION FROM DARY ADDREPACE LTD.					

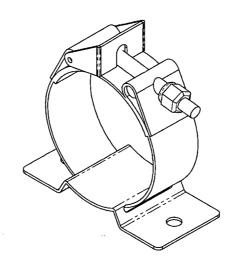
W/O:			WO	RK ORDER CHANG	ES				<u>, , , , , , , , , , , , , , , , , , , </u>	
DATE	STEP	PROCEDURE CHANGE			Ву	Da	ate Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
Part No	:	PAR #:	Fault Categ	ory:	NCR: Ye	s No	DQA:	Date:		
Resolution:			Disposition: Q			Closed	osed: Date:			
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NO	CR)				
DATE	STEP	Description of NC	Corrective Action Section			Sign & Verifica			Approval	
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 DART AEROSPACE PART NUMBER
 JOHN CAMERON AVIATION PART NUMBER

 D4022-3
 REF JCA/M47/D3/SHT 13

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SPECIFICATION CONTROL DRAWING



w/0595/2

DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	MATERIAL	FITS MOTOR SIZE	
	WELDON	TC 250-100	STAINLESS STEEL	2.5	
D4022-3	AIRCRAFT SPRUCE AND SPECIALTY	05-00021	STAINLESS STEEL	2.5	
	AEROSPACE ACCESSORIES	TC 250-100	STAINLESS STEEL	2.5	

D4022-X FUEL PUMP MOUNTING BRACKET



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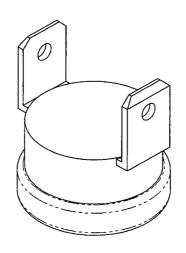
NOTES:	
1) MATERIAL: N/A	
2) FINISH: N/A	
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERW	ISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED	
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX	
6) IDENTIFICATION: N/A	
7) WEIGHT: 0.33 lbs	

DESIGN	15	DART AEROSPACE LTD					
DRAWN	45	HAWKESBURY, ONTARIO, CANADA					
CHECKED		DRAWING NO.	REV. A				
MFG. APPR.	匿	D4022	SHEET 3 OF 4				
APPROVED AP		TITLE	SCALE				
DE APPR.		FUEL PUMP	NTS				
DATE 10.0)4.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINATE AND CONFIDENTIAL AND IS EXPIRED ON THE DUPRESS COMMITTON THAT IT IS NOT TO BE USED FOR MY PURPOSE OR COPIED OR COMMINICATED TO MY THEIR PURPOSE ON THE PURPOSE OR THE PURPOSE OF THE PURPOSE OR THE PURPOSE OF THE P					

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DATE	STEP	TEP PROCEDURE CHANGE				Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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			Disposition:					
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCR)		
DATE	STEP	Description of NC	SCRIDUON OF INC		ive Action Section B		Approval	Approval
- DATE	JILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Chief Eng	QC Inspector
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DART AEROSPACE PART NUMBER JOHN CAMERON AVIATION PART NUMBER D4022-5 REF JCA/M47/D3/SHT 13

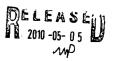
SPECIFICATION CONTROL DRAWING



2

DART PART NUMBER	POSSIBLE SUPPLIER	SUPPLIER PART NUMBER	ALTERNATE PART NUMBER	TEMPERATURE WHEN SWITCH OPENS
	FARNELL	1006847	3775628	125°F
D4022-5	HONEST-WELL	T23A125BSR2-15	3775628	125°F
	NEWARK	98K1992	3775628	125°F

D4022-X THERMAL SWITCH



N	IOTES:
1) MATERIAL: N/A
) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTE
4	UNITS: INCHES UNLESS OTHERWISE NOTED
	BREAK SHARP EDGES: 0.005 TO 0.010 MAX
	DENTIFICATION: N/A
	WEIGHT: 0.00 lbs

DESIGN	45	DART AEROSPACE LTD				
DRAWN	A	HAWKESBURY, ONTARIO, CANADA				
CHECKED	B	DRAWING NO.	REV. A			
MFG. APPR.	8	D4022	SHEET 4 OF 4			
APPROVED	140	TITLE	SCALE			
DE APPR.	4	FUEL PUMP	NTS			
DATE 10.0	4.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD THE DOCUMENT IS PRIVATE AND COMPICENTIA, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO SE USEDFOR ANY PURPOSE OR COMPILINATION TO ANY OTHER PERSON WITHOUT WINTER PROPESSION FROM DART APROPAGE, ITD				

W/O:			WO	RK ORDER CHANG	ES	·			
DATE	STEP	PR	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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Part No	:	PAR #:	Fault Categ	ory:	_ NCR: Yes	No DQA	\:` <u></u>	Date:	
		Disposition: QA: N/C Closed:							
NCR:			WORK ORDE	R NON-CONFORM	ANCE (NC	₹)			
DATE	STEP	Description of NC	Corrective Action Section			Verific	cation Approval		Approval
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